I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 548 427 026 US, in an expelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.								
Dated: August 4, 2004 Signature: (Rebecca McElroy)								
FORM PTO 1390 HE DEDARTMENT OF COLUMBRICE DATENT AND TRANSPORT ATTORNIEW'S DOCKET AND MEDICAL								
(REV 10-2003)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OF	FFICE ATTORNEY'S DOCKET NUMBER 246152015600						
1	TAL LETTER TO THE UNITED STATES	U.S. APPLICATION NO. (If known, see 37 CFR 1.5)						
DESIGNATED/ELECTED OFFICE (DO/EO/US)		10/018,009						
INTERNATIONAL A	NING A FILING UNDER 35 U.S.C. 371 PPLICATION NO. IINTERNATIONAL FILING DAT							
PCT/EP00	£	14 June 1999						
TITLE OF INVENTION GENES ENCODING ENZYMES IN THE BIOSYNTHESIS OF PIMARICIN AND THE APPLICATION THEREOF								
APPLICANT(S) FOR DO/EO/US Jesus F. APARICIO et al.								
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:								
1. This is a FIR	This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.							
2. x This is a SECOND or SUBSEQUENT submission of items concerning a filing 35 U.S.C. 371.								
3. This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.								
4. The US has been elected (Article 31).								
5. A copy of the	5. A copy of the International Application as filed (35 U.S.C. 371 (c)(2))							
a. is attache	a. is attached hereto (required only if not communicated by the International Bureau).							
b. has been	b. has been communicated by the International Bureau.							
c. is not req	c. is not required, as the application was filed in the United States Receiving Office (RO/US).							
6. An English la	6. An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).							
a. is attache	d hereto.							
b. has been	previously submitted under 35 U.S.C. 154(d)(4).							
7. Amendments	to the claims of the International Application under PC	T Article 19 (35 U.S.C. 371 (c)(3))						
a. are attach	ned hereto (required only if not communicated by the Int	ternational Bureau).						
b. have been	b. have been communicated by the International Bureau.							
c. have not								
d. have not	d. have not been made and will not be made.							
8. An English la	An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).							
9. An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).								
An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).								
Items 11 to 20 below concern document(s) or information included:								
11. An Information	1. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.							
12. An assignmen	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.							
13. A preliminary	A preliminary amendment.							
14. An Application	An Application Data Sheet under 37 CFR 1.76.							
15. A substitute s	A substitute specification.							
16. A power of at	6. A power of attorney and/or change of address letter.							
17. X A computer-r	7. X A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.							
18. A second cop	A second copy of the published international application under 35 U.S.C. 154(d)(4).							
19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).								
20. X Other items o	r information: Response to Notification of Defective R Paper copy of sequence listing (80 page Return Receipt Postcard							
L								

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/018,009		INTERNATIONAL APPLICATION NO. PCT/EP00/06227		ATTORNEY'S DOCKET NUMBER 246152015600			
21. x The following fees are submitted:				CALCULATIONS PTO USE ONLY			
BASIC NATIONAL FI							
Neither international nor international sea and International Sea							
International prelimi USPTO but Internat							
International prelimi but international sea							
International prelimi							
International prelimi and all claims satisfi							
ENTER	\$						
Surcharge of \$130.00 for from the earliest claimed	\$						
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE				
Total claims	-20 =		х	\$			
Independent claims	-3 =		х	\$			
MULTIPLE DEPENDE			+	\$ \$ 0.00			
Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above				\$ 0.00 \$			
are reduced by ½. SUBTOTAL =				\$ 0.00			
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).							
TOTAL NATIONAL FEE =				\$ 0.00			
Fee for recording the encl be accompanied by an app	\$						
TOTAL FEES ENCLOSED =				\$ 0.00			
			:	Amount to be refunded:	\$		
				charged:	\$		
a. A check in the amount of \$ to cover the above fees is enclosed.							
b. Please charge my Deposit Account No. 03-1952 in the amount of \$ 0.00 to cover the above fees. A duplicate copy of this sheet is enclosed.							
c. x The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-1952 . A duplicate copy of this sheet is enclosed.							
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card							
information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive							
(37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.							
SEND ALL CORRESPONDENCE TO:							
Kate H. Murashige SIGNATURE: O MORRISON & FOERSTER LLP Kate H. Murashige							
3811 Valley Centre D	<u> </u>						
San Diego, California 92130 (858) 720-5112			29,959				
1	CUSTOMER NUMBER: 25225 REGISTRATION NUMBER						

FORM PTO-1390 (REV 10-2003) page 2 of 2 sd-212872

PATENT Docket No. 246152019400

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Express Mail Label No.: EV 548427026 US

Date of Deposit: August 4, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450.

Rebecca McElroy

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Jesus F. APARICIO et al.

Serial No.:

10/018,009

Filing Date:

(Intl.) June 14, 2000

International Application No.: PCT/EP00/06227

For:

GENES ENCODING ENZYMES IN THE BIOSYNTHESIS OF PIMARICIN AND

THE APPLICATION THEREOF

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE

MAIL STOP PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This is in response to a Notification Of Defective Response mailed July 12, 2004, for which a response is due on August 12, 2004. Accordingly, this response is timely filed.

Please enter the following substitute sequence listing and remarks.

In the Sequence Listing:

Please insert a substitute paper copy of the Sequence Listing as new pages 1-80. A substitute computer readable form copy of the Sequence Listing (CRF COPY) accompanies this response.

REMARKS

The sequence listing has been amended to correct the errors identified in the raw sequence listing error report mailed July 12, 2004. The undersigned hereby states that the substitute computer readable form copy (CRF copy) of the Sequence Listing and the substitute paper copy of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.825(a) and (b), respectively, are the same and contain no new matter. Accordingly, entry of the substitute Sequence Listing into the above-captioned case is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. <u>246152015600</u>. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

By:

Respectfully submitted,

August <u>+</u>, 2004 Dated:

Cate W. Muadyo Kate H. Murashige

Registration No. 29,959

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San Diego, California 92130-2332

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